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## FOREST STEWARDSHIP PLAN

#### Landowner(s) as Shown on Deed:

REEDSVILLE COMMUNITY SCHOOL FOREST

#### Name and Address of Contact Person:

REEDSVILLE COMMUNITY SCHOOL FOREST, ATTN: LACEY SWETLICK

340 MANITOWOC ST REEDSVILLE, WI 54230-9372

Plan Period: 10 years

**Municipality(s):** Village of Reedsville (Manitowoc County)

Starting January 1, 2022 Ending December 31, 2031

Total Acres: 20.000

#### Attached map(s) show the location of the lands included in this Forest Stewardship Plan.

### **Purpose of the Forest Stewardship Program**

The purpose of the Forest Stewardship Program is to encourage the long-term stewardship of nonindustrial private forest lands, by assisting these owners to plan for and more actively manage their forest and related resources. The Forest Stewardship Program provides assistance to owners of forest lands and other lands where good stewardship will enhance and sustain the long-term productivity of multiple forest resources. The program provides landowners with the professional planning and technical assistance they need to keep their land in a productive and healthy condition.

The Forest Stewardship Program is a federal program that is authorized by the Cooperative Forestry Assistance Act of 1978, as amended, 16 U.S.C. 210sA. In Wisconsin the program is administered by the Wisconsin Department of Natural Resources Division of Forestry.

## Management Plan

Your Forest Stewardship management plan incorporates "sound forestry practices" for Wisconsin. "Sound forestry practices" includes timber cutting, transporting, pruning, planting, and other activities recommended or approved by the WDNR for the effective propagation and improvement of the various timber types common to Wisconsin. It includes management of forest resources other than trees including wildlife habitat, watersheds, aesthetic and endangered and threatened plant and animal species. Forest management guidelines for Wisconsin can be found in the Department of Natural Resources <u>Silviculture Handbook</u> and the <u>Forest Management Guidelines</u>. To read these publications go to <u>http://dnr.wi.gov</u> and search 'Forest Management'.

An approved Forest Stewardship Plan may provide access to cost-share assistance through USDA conservation programs like the Natural Resources Conservation Service (NRCS) Environmental Quality Incentive Program and the WDNR Wisconsin Forest Landowner Grant program.

Your plan identifies important management practices prescribed for your property. The plan writer determines management practices based on the types and conditions of your forests, the capability of the land, and the objectives or goals you have expressed for your forest land. The plan writer prescribes a completion year for each practice. You should review your plan periodically so you can prepare for the work that is needed. Consult your WDNR forester when you have questions on what is included in your plan.

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Your management plan is just one component of Wisconsin's strategy to promote and support sustainable forestry practices on privately owned lands. Other resources are available to provide you with the most current information

practices on privately owned lands. Other resources are available to provide you with the most current information available on natural resources management. You can access those resources on the WDNR public website using the addresses referenced in this plan. You are encouraged to consult this information regularly.

## **Management Plan Updates**

You and your forester should monitor your management plan throughout the period covered by the plan to address concerns that are newly present or newly identified since the date your plan was written. Updates might include changes in tree species, tree stocking, damage from weather (wind, ice, snow), insects and disease, forest fire, flooding, land management goals, new management information (silvicultural science), invasive species, fire management, riparian management zones, or presence of endangered, threatened or high conservation value species or communities. An update will usually change the type of practice recommended or the year it should be completed.

## Landowner Goals

Your management plan blends your goals with site capabilities and Forest Stewardship program standards to guide your land management. You identified the following as your goals:

· Landowner goals have not yet been identified.

## **Management Practices**

The management practices in this plan include practices that will enhance the growth rate and species composition of your forest; provide for the establishment of a new stand of trees; improve wildlife habitat and recreational activities; increase carbon sequestration; reduce fire hazards on your property; improve access; and help you meet your other goals. The table below is a summary of the recommended management practices that are specific to the individual timber stands described later in this plan. If a year is provided the practice should be completed or in progress by the end of that year to keep your forest in a productive and healthy condition. If there is no year provided you can complete the practice at any time.

You are encouraged to work with a cooperating forester to establish and administer timber sales. Use the <u>Forestry</u> <u>Assistance Locator</u> to find a cooperating forester; go to <u>http://dnr.wi.gov</u> and search 'Forest Landowner'.

Practices that are not considered commercial may be eligible for cost-share assistance under the Wisconsin Forest Landowner Grant Program (WFLGP) or USDA conservation programs like the Natural Resources Conservation Services (NRCS) Environmental Quality Incentive Program (EQIP).

Listed here are practices common to all timber stands:

- Seeding and mowing of trails and openings Please contact your local WDNR Wildlife Biologist for information about seed mixtures
- Maintaining snags, den trees, and "wolf" trees Retain trees during timber harvests and improvement cuts
- Controlling invasive species
- To learn more wildlife friendly ideas, go to <u>http://dnr.wi.gov</u> and search 'Wildlife'.

Management Practices Summary (by Individual Stand)					
YEAR	EAR STAND(S) ACRES TIMBER TYPE PRACTICE				
2024	1	10	Swamp Hardwoods	SANITATION and SALVAGE CUTTING	
ANY	1	10	Swamp Hardwoods	HAND PLANT	
ANY	2	10	Miscellaneous Deciduous	HAND PLANT	

## **County Cutting Notice**

At least 14 days prior to harvesting timber a notice of your intent to harvest (cut) must be filed with the county clerk. Property taxes must be current prior to receiving approval to cut timber.

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## **General Description of Areas Identified on Your Property**

Foresters combine areas of land with similar vegetative and non-vegetative characteristics for management purposes and call these areas "stands". The plan describes these stands and you can view the stands on the Forest Stewardship map(s). Listed below are the descriptions of forest and non-forest areas on your property.

#### **Miscellaneous (Other) Deciduous Forest**

Miscellaneous (Other) Deciduous Forests is a catchall label for uncommon or non-native hardwoods that do not fit well into any other timber type. This type consists of more than 50% box elder, black locust, honey locust, non-native elm, Norway maple or other non-native hardwoods.

This forest type grows on a wide range of soil conditions.

#### Swamp Hardwood Forest

Swamp Hardwood Forests consist of any combination of more than 50% black ash, green ash, red maple, silver maple, swamp white oak, or American elm. This type occurs on wetlands characterized by a fluctuating water table near or above the soil surface with a subsurface water flow. Aspen, white cedar, balsam fir, white pine, white birch and other native trees commonly grow with swamp hardwoods.

Swamp hardwoods typically grow on very wet soils in closed water basins that do not have a stream or river running through them and that experience significant water table fluctuation. Though capable of growing in semi-stagnant conditions, they grow best if the water is moving and aerated. Swamp hardwoods are subject to wind throw due to high water table. When selecting a cutting method, consider its effect on the water table. On some sites, the growth of swamp hardwoods can be slow, making these swamp hardwood stands non-productive.

#### **Resource Protection and Management**

Special records and inventories identify important natural, historical or archeological resources on or near your property. The plan writer designed your management practices to protect these resources from disturbance.

You can go to the WDNR website to find information used to evaluate stand conditions and determine management practices for your property. Go to <u>http://dnr.wi.gov</u> and search using the keywords shown.

- To learn about Ecological Landscapes of Wisconsin, search for 'Landscapes'.
- To learn about Wildlife Management, Habitat and Natural Communities, search for 'Wildlife' and 'Biodiversity'.
- To see the Wisconsin Wildlife Action Plan, and from there Explore Species Profiles, search for 'ER' or 'Wildlife'.

Your lands lie within a landscape known as Central Lake Michigan Coastal. You can find an overview of the landscape, species of greatest conservation need, management opportunities and much more. Go to: <u>http://dnr.wi.gov</u> and search 'Landscapes'.

## Endangered, Threatened and Special Concern Species and Plant Communities

Natural Heritage Inventory (NHI) searches determine if your plan may affect endangered, threatened, or special concern animals, plants or plant communities. To learn about rare plants, animals and natural plant communities in Wisconsin visit <u>http://dnr.wi.gov</u> and search for 'NHI'.

The Natural Heritage Inventory (NHI) review showed that that there are no known Endangered, Threatened or Special Concerns Species or Natural Communities present on or within the surrounding area.

When implementing management practices, mitigation might be necessary, such as:

- Best management practices that protect water quality and habitat for rare or aquatic species
- Harvest limits or restrictions to avoid impacts to nesting birds or NHI Working List species
- Surveys for rare species prior to timber sale establishment

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## Archeological and Historical Resources

State Historical Society records searches determine if your plan may affect archeological and historical sites. These sites require protection from disturbance, including road building, grading or gravelling. Contact your local WDNR Forester for additional information on archaeological and historical sites.

The Archeological Resources Inventory has not yet been reviewed for possible resources on this property.

The Historical Resources Inventory has not yet been reviewed for possible resources on this property.

### **Invasive Plant Species**

Invasive plants may decrease the productivity, regeneration, wildlife habitat, and recreational value of your property. It is essential to identify and control small populations of invasive plants to minimize their spread. The individual stand descriptions list any invasive plant species identified on your property. For more information on invasive plant control, consult the Wisconsin Council on Forestry's website on <u>Invasive Species Best Management Practices for Forestry</u>.

## **Best Management Practices for Water Quality (BMPs)**

To protect the water quality in Wisconsin's lakes, streams and wetlands and to prevent soil erosion, implement *Wisconsin's Forestry Best Management Practices for Water Quality* during all forest management activities, such as road building or timber harvesting. Specific BMPs will be included in detailed practice or harvest plans. Water regulations permits may be required to cross wetlands and streams. Please go to <u>http://dnr.wi.gov</u> and search 'Forest Management' to review all <u>BMPs for water quality</u>.

## **Forest Health**

Over time, your forest may suffer from insects, disease, windstorm, fire, flooding or drought, etc. These problems may alter your management prescriptions. If you are concerned about forest health, please contact your local WDNR Forester or go to <a href="http://dnr.wi.gov">http://dnr.wi.gov</a> and search 'Forest Health'.

	STAND NUMBER 1	10 Acres
Primary Type:	Swamp Hardwood Forest Small Sawtimber	
Secondary Type:	Swamp Hardwood Forest Poletimber	

#### Stand Information

The most abundant tree species in this stand is Ash (70%).

These trees make up a two-aged stand with two distinct age classes. The oldest age class of trees originated about (unspecified). Management practices must take into account that some trees will become mature earlier than other trees.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a muck soil. Muck soils usually occur in wetlands, and have a surface layer of decomposed plant material at least 16" thick. The extent of decomposition of plant parts prevents identification of the original vegetation. Muck soils are wet, so organic matter decomposes slowly and nutrients may not always be available for tree growth. Trees that grow on muck soils are adapted to wet conditions and are typically slow growing. Take care to prevent compaction and rutting when using equipment on these soils. In general, conduct management activities only when the ground is well frozen. These soils may be unsuitable for whole-tree harvesting and the harvesting of fine woody material because of their potential for nutrient depletion.

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### Stand Conditions, Special Features or Characteristics

This stand contains a heavy component of Ash species, which are actively in decline due to the onset of Emerald Ash Borer. Recommend salvage thinning to reduce hazards along Mud Creek Trail, removal of all ash and other high risk trees within 70' of the trail areas. Recommend artificial regeneration of wetland adapted species such as tamarack, swamp white oak, and silver maple to replace lost volume of ash trees.

#### Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

FORCED REGENERATION OF TIMBER TYPE -- Manage and regenerate the tree species in your forest after harvesting or completing your prescribed management treatments through a combination of seeding, planting, site preparation, prescribed burning, etc. Natural conversion is not expected because desired tree seedlings are not present or will not become established without developing the proper seedbed, light and crown canopy conditions, or by planting trees.

Your management plan prescribes the best method to regenerate new trees. Forced maintenance of your timber type may take time or extra expense. The success of your practice will take diligence and monitoring on your part.

Year Scheduled	Management Practice			
2024	SANITATION and SALVAGE CUTTING. Remove trees damaged by natural events (wind, fire, etc.), or trees infected by or highly susceptible to insect damage or disease to keep the rest of the stand healthy. Work with your local WDNR Forester to identify the trees to harvest.			
ANY	HAND PLANT. Hand plant a mixture of Tamarack, Swamp White Oak, Silver Maple, Basswood, Bur Oak, Red Maple, White Cedar, River Birch, Sycamore and Willow (includes Black) at a rate of 200 trees per acre. Please contact your local WDNR forester for spacing recommendations. Custom planting crews may be available for hire to complete your tree planting project. Check this stand for successful regeneration. If this stand has not adequately regenerated three years after hand planting, additional management practices may be needed.			

	STAND NUMBER 2	10 Acres
Primary Type:	Miscellaneous (Other) Deciduous Forest Seedlings and Saplings	
Secondary Type:	Miscellaneous (Other) Conifer Forest Seedlings and Saplings	

#### Stand Information

The most abundant tree species in this stand is Sugar Maple seedlings and/or saplings.

These trees make up an even aged stand that originated about 2022. Tree ages in even-aged stands may vary slightly, but the trees began growing in relatively the same period.

Soil type, moisture and nutrient availability affect site quality, which limits the kind of tree species that will grow on a site, as well as the growth rate and quality of individual trees. Soil productivity also determines the amount of timber harvesting that is sustainable over time. It also affects other forest attributes, such as wildlife habitat and biodiversity.

This stand has a loam soil. Loam soils are a mixture of sand, silt and clay particles. Loam soils are 23% to 52% sand, 28% to 50% silt, and 48% to 78% clay. Silt loam or silt soils have relatively higher amounts of silt particles. Loam soils typically have an abundance of moisture and nutrients to sustain excellent growth rates for many tree species. Take care to prevent compaction and rutting when using equipment on these soils.

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### Stand Conditions, Special Features or Characteristics

This stand will be planted over several years beginning in 2022. This will include a variety of hardwood and softwood species outlined in attached tree planting plan.

#### Management (Silvicultural) System

Manage and regenerate this stand within generally accepted silvicultural guidelines for the primary type according to the following management system.

FORCED REGENERATION OF TIMBER TYPE -- Manage and regenerate the tree species in your forest after harvesting or completing your prescribed management treatments through a combination of seeding, planting, site preparation, prescribed burning, etc. Natural conversion is not expected because desired tree seedlings are not present or will not become established without developing the proper seedbed, light and crown canopy conditions, or by planting trees.

Your management plan prescribes the best method to regenerate new trees. Forced maintenance of your timber type may take time or extra expense. The success of your practice will take diligence and monitoring on your part.

Year Scheduled	Management Practice
ANY	HAND PLANT. Hand plant a mixture of White Pine, White Spruce, Sugar Maple, Red Oak, Bitternut Hickory, Black Cherry, White Birch, Walnut Black, Red Maple, Mixed Conifer and Mixed Hardwoods at a rate of 900 trees per acre. Please contact your local WDNR forester for spacing recommendations. Custom planting crews may be available for hire to complete your tree planting project. Check this stand for successful regeneration. If this stand has not adequately regenerated three years after hand planting, additional management practices may be needed.

## ADDITIONAL INFORMATION FOR MANAGEMENT OF YOUR PROPERTY

## **Cost Share on Forest Management or Tree Planting**

State and Federal programs are available to help share the cost of implementing certain forest management or tree planting projects. You can find more information about <u>financial help and cost share programs</u>; go to <u>http://dnr.wi.gov</u> and search 'Forest Landowner'.

You can purchase seedlings through the state nursery program. To learn more about tree availability or to create your own tree planting plan visit: <u>http://dnr.wi.gov</u> and search 'Tree Planting'.

## **Timber Harvest Contracts**

It is very important that you and your logging contractor have a written and signed contract to guide the harvesting process before starting any harvesting. For more information on <u>writing contracts</u> for timber sales please visit <u>http://dnr.wi.gov</u> and search 'Forest Landowner'.

## **Non-Timber Forest Products**

If you harvest non-timber products, including but not limited to mushrooms, berries, ferns, evergreen boughs, cones, nuts, seeds, maple sap, bark, twigs, moss, and edible and/or medicinal plants be sure to follow all applicable laws. Wisconsin statutes may regulate some of these non-timber products, such as ginseng. Others might be threatened or endangered species, and protected by law. Also take care to prevent over-harvesting and reducing biological diversity and ecosystem functions. For additional information on how harvesting of non-timber forest products will affect management of your forestland please contact your local WDNR Forester using the <u>Forestry Assistance Locator</u>; go to <u>http://dnr.wi.gov</u> and search 'Forest Landowner '.

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## Forest Certification

Forest certification systems are market-based, non-regulatory means to assure end users that the wood products they purchase have been grown, managed, and harvested in socially acceptable and environmentally responsible ways. More and more wood-using industries and consumers demand proof they are buying wood from sustainably managed woodlands.

Third party certification is beneficial in many ways, some of which are the ability to sell to the certified marketplace; future ability to participate in carbon markets; and an opportunity to educate the public about the importance of well-managed private forests.

Landowners who have a Forest Stewardship Plan for their property and have implemented practices according to the plan may be eligible to participate in the American Tree Farm System (ATFS) forest certification program through the Wisconsin (State) Tree Farm Committee (WTFC) group. Applications and information on the ATFS Forest Certification program can be found online at <u>American Tree Farm System Certification (https://www.treefarmsystem.org/certification-american-tree-farm-system</u>) and the <u>Wisconsin Tree Farm Committee (http://witreefarm.org/</u>).

For more information about forest certification, please contact your DNR Forester or visit <u>http://dnr.wi.gov</u> and search for 'Forest Certification'.

### Wildfire Prevention and Planning

Every year in Wisconsin, thousands of wildfires occur, destroying dozens of structures and threatening to burn hundreds more. An increasing number of people living and recreating in Wisconsin's wildland-urban interface is creating a growing need for fire prevention and planning for fires that will inevitably occur.

Because of their proximity to forested lands, there is the potential for homes and property to be at significant risk of damage or destruction in the event of a wildfire. As part of the landscape planning process, it is important to determine the level of danger to properties and learn how to mitigate those dangers.

You can take action to reduce the exposure of your home or property to fire. Use fire resistant building materials, incorporate fuel breaks into the landscape, and know the local burning restrictions.

For more information on <u>fire danger and burning permit restrictions</u>, go to <u>http://dnr.wi.gov</u> and search 'Fire'. For more information on <u>making your home and property more survivable</u> in the event of a wildfire, go to <u>http://dnr.wi.gov</u> and search 'Firewise'.

## **Forest Carbon**

Forests are a significant piece of the global carbon cycle because of their ability to absorb and sequester carbon dioxide. Learn how your forest adds to the global carbon balance and be aware of the rules affecting your participation in forest carbon markets. For information, visit the US Forest Service website: <u>http://www.na.fs.fed.us/ecosystemservices/carbon/</u>.

## Lands included in the Forest Stewardship Plan

In conjunction with your maps and air photos, this land information helps you to identify your lands covered by this plan.

			Enrolled Acreage		
Town/Range/Section	Legal Description	Tax Parcel ID No.	Certified Survey Map Information	Open to Public Access	Closed to Public Access
County: Manitowoc		Municipality: Village of Reedsville			
19N-21E-02	NWNE, PART OF	03600200300000		0.000	10.000
19N-21E-02	SWNE, PART OF	03600200201100		0.000	10.000

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	Total Acreage:	0.000	20.000
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## Forester Contact Information

Contact your local DNR Forester for information about:

- activities addressed in your plan
- implementing your plan
- planning for a timber harvest and sample timber sale contracts
- State and Federal cost-sharing available for some practices
- the Managed Forest Law (MFL) a Wisconsin property tax incentive program

#### Plan Preparer Contact Information

SCHROEDER, JAKE WISCONSIN DNR 110 SOUTH NEENAH AVENUE STURGEON BAY, WI 54235-2718 (715) 927-1870 JACOBA.SCHROEDER @WISCONSIN.GOV DNR Forester Contact Information SCHROEDER, JAKE DEPARTMENT OF NATURAL RESOURCES 110 SOUTH NEENAH AVENUE STURGEON BAY, WI 54235-2718 (715) 927-1870 JACOBA.SCHROEDER@WISCONSIN.GOV State of Wisconsin DEPARTMENT OF NATURAL RESOURCES DNR Service Center 110 South Neenah Avenue Sturgeon Bay WI 54235

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



# <u>Reedsville School Forest</u> <u>Tree Planting Plan</u>

Legal: SW1/4, NE1/4, S02 T19N R21E Planting Year: 2022

## Planting Objectives:

This is a planting of a variety of hardwood and softwood species to provide a space for experiential learning for the students of Reedsville School District. A variety of trees will be planted to give students experience recognizing different species and how they are sustainably managed. The planting area is approximately 10 acres of open field directly East of Reedsville Elementary. Additional planting may be done in the existing forest trail along Mud Creek to mitigate the effects of Emerald Ash Borer.

## Site Preparation

The site was prepared in fall of 2021 with mowing and application of contact herbicide. Optionally, a cover crop of winter wheat can be sown in spring prior to planting.

## Tree Order

Fall before planting: Order the trees needed from the DNR nursery or private nursery. Information on ordering from the DNR is available at: <a href="https://dnr.wi.gov/topic/treeplanting/order">https://dnr.wi.gov/topic/treeplanting/order</a>

Species Group	Available Species	Acceptable Substitutes	Quantity
Wet	Tamarack, Sycamore, <b>Bur</b>	Swamp White Oak,	3600
Tolerant/Lowland	Oak, River Birch,	Silver Maple, Red	
Species	Basswood, White Cedar	Maple, Black Spruce	
Softwood Screen	White Pine, White Spruce,	Red Pine, Balsam Fir,	1000
		White Cedar	
Upland	Sugar Maple, Red Oak,	White Oak, White	3600
Hardwoods	Black Cherry, Black Walnut,	Birch, <b>Bitternut</b>	
		Hickory	
Forest Edge	Red Osier Dogwood,	Silky Dogwood, Wild	500
Wildlife Shrubs	Ninebark, Highbush	<b>Plum,</b> Juneberry,	
	Cranberry	Buttonbush	
Total Trees			8700

Bold trees are more preferred by deer and will be at a higher risk of browse; these species should be protected from deer to ensure survival.

\* It can be beneficial to order in large quantities (500+ or 3000+) of a single species to get lower per seedling prices.

\*DNR tree seedlings are delivered mid-April to the first week in May. Be prepared with a cool location (approx. 40 degrees) to store seedlings. If planting a wet site, consider picking up trees at the nursery to avoid having to store seedlings until the field dries out enough to plant.

## Tentative Planting Spacing and Layout

These are ideas for planting based on the goals discussed, actual layout and composition can change based on planning around other educational activities. Trails will be left open within the planting area; also consider a mowed 12' firebreak along the plantation.

Softwood Screen (green on map,  $\sim$ 2 acres): Plant 600 White Pine and 300 White Spruce in rows spaced 10' apart with trees spaced 10' within rows. The planting goal will be 450 trees per acre. Put White Spruce on outer edges of plantation and White Pine on inner rows.

Upland Hardwoods (Red on map, ~4 acres): Plant 1000 Sugar Maple, 1000 Red Oak, 1000 Black Walnut, and 600 Black Cherry (*species based on availability at state nursery, White Oak and White Birch may be available privately sourced.*) Plant in rows 8' apart and with trees 6' apart within rows. The goal is 900 trees per acre. Species will be grouped by blocks of like species, avoid mixing walnut with other species. Species will be planted on well-drained sites. Alternatively, these sites could be planted to more softwood trees or to lowland species.

Wildlife Shrubs (Purple on map,  $\sim$ 1acre): Plant clumps of shrubs spaced at least 10' apart along the edge of existing windbreak rows.

Wetland Species (Blue on map,  $\sim 3$  acres) Plant 1000 Tamarack, 600 River Birch, 500 White Cedar, 500 Bur Oak, 500 Basswood, and 500 Sycamore (*species based on availability at state nursery, Swamp White Oak, Red Maple, or Silver Maple may be available privately sourced.*) Plant in rows 8' apart and with trees 6' apart within rows. The goal is 900 trees per acre. Species will be grouped by blocks of like species. Species can be planted on well or poorly drained areas. The blue outline on the map represents the wettest parts of the field.

Wetland Underplanting (Grey on map, ~9 acres) This planting will be to address the loss of the ash trees in the river-bottom trail area due to Emerald Ash Borer. Plant ~100 trees per acre on firm ground around this parcel. Plant 300 Tamarack, 200 River Birch, 100 White Cedar, 100 Bur Oak, 100 Basswood, and 100 Sycamore (*species based on availability at state nursery, Swamp White Oak, Red Maple, or Silver Maple may be available privately sourced.*)

Potential Future Planting (Orange on map, 1.5 acres) This area could be used to connect the existing trail to the planted forest if renovations included removal of some parking space. Softwoods and hardwoods could be planted along this path. This year could include planting 100 softwoods on existing open space to provide cover for trail area.

Seedling Protection: Many hardwood species (as well as any cedar or hemlock) are at a high risk of deer browse and will require protection. Sources for tree shelters and other supplies are available at: <u>https://dnr.wisconsin.gov/topic/treeplanting/supplies</u>

Note: The County has tree planting machines that can be rented through your local DNR Forester, contact the DNR forester early if interested. There are also contractors available to help with planting for a fee.



## Maintenance

Spring After Planting: Mow between rows 3 times throughout the summer before the weeds and grasses over-top the trees. Mowing is required and is critical to tree planting success! 1st mowing should be completed before the end of May, the 2nd mowing by early July, and the 3rd in mid-September. Mowing reduces rodent habitat and keeps rows visible for follow-up needs. Mow within 3 inches of the ground if possible. Mowing also reduces vegetation that can smother seedlings when snow mats them down. Mowing is needed for at least the first 3 years and possibly longer to ensure successful establishment.

Summer After Planting: Monitor weed competition and seedling survival.

Fall After Planting: After trees are dormant (this is usually late October or early November,) row spray a 2-3' wide band of suitable preemergent herbicide over trees to control weeds. An example of a preemergent to use would be Oust at 1oz per acre. Only apply after trees are dormant but before the ground freezes. When mixing Oust, be certain to dilute the Oust granules in a small container of water by shaking them for 3-5 minutes prior to putting them in your spray tank. This stops them from settling at the bottom of the tank and getting blown out as granules which are not effective. Oust residue in a sprayer is very hard to remove and can damage non-target species such as corn if the sprayer is used to control weeds in agricultural fields.

Next Summer: Mow 3 times throughout the summer before weeds and grasses begin to over-top the trees. Monitor weed competition and seedling survival.

Next Fall: After trees are dormant, row spray a 2-3' band of preemergent herbicide to control weeds. This is optional but may be beneficial to keeping weed competition down.

Beyond 2024: Continue mowing for at least 3 years, or until trees are established and above weed competition. Mowing is necessary for a longer period for hardwood plantations to be successful, especially to reduce rodent habitat and prevent tree loss from girdling.

Remember that seedlings are planted at their spacing to encourage good stocking and growth form of young trees. Older trees need more space; periodic thinning as they age will be important to keeping them healthy and giving them space to grow.

## General tree planting recommendations

Invasive Species: Continually monitor plantations for invasive plant species such as buckthorn, honeysuckle, autumn olive, and barberry. Remove these species quickly once identified through hand pulling or herbicide application.

Deer Browse: Deer browse can wipe out entire plantations. . Tree tubes or 5' welded wire cages can be used to protect seedlings. Bud capping may be practical for softwood species.

Raptor Perches: You can help provide year-round and around-the-clock rodent control by creating perches for both hawks and owls to hunt tree damaging rodents like mice, voles, and rabbits. Rodent damage can be a substantial cause of seedling damage, particularly to hardwoods.

Boxelder and Cottonwood Control: These are considered "weedy trees" that will seed into new tree plantations and can quickly outgrow the planted seedlings. A few female boxelder trees can spread seed over several acres of plantation. Control boxelders by cutting them and applying the chemical ELEMENT 4 to the stump immediately after cutting. This will prevent them from resprouting. Cottonwood is another tree that can aggressively seed into tree plantings and overtake the planted seedlings. Unwanted woody vegetation in tree plantations can be removed through basal bark or cut-stump herbicide treatments with element 4 and bark oil.

Wildfire Risk: If the plantation is in a high fire hazard area, maintain twelve-foot firebreak around the entire perimeter of the tree planting by tilling the area to bare mineral soil or continuously mowing the fire break to prevent build-up of dead vegetation.

Herbicide Application: Ensure all herbicides used are labeled for forestry use. Some herbicides are restricted on MFL lands. It is recommended to hire a custom herbicide applicator. Landowners do not need to be a licensed pesticide applicator but herbicide applicators for hire must have a Pesticide Applicators license. If landowners are applying herbicides, they must ensure their sprayers are calibrated correctly and operating at correct pressures.

Prepared by Jake Schroeder, DNR Forester. Questions? 715-927-1870 or <u>Jake.Schroeder@Wisconsin.gov</u>